

Abstract

The invention discloses the human chemokine HCC-1, N-terminally truncated HCC-1 molecules and glycosylated HCC-1 which improve the homing of stem cells into the bone marrow during stem cell transplantation. It is also provided  
5 a procedure for producing the polypeptides by recombinant techniques or chemical synthesis and for producing antibodies against such polypeptide. Furthermore, it is disclosed the modification of the polypeptide by coupling of amino acid residues and/or chemical groups or deleting amino-acids generating potent derivatives of the polypeptide. Another aspect of the  
10 invention provides a combination of the polypeptide of the present invention and a suitable pharmaceutical carrier for providing a therapeutically effective amount of the polypeptide for the treatment of various associated diseases. The invention concerns also the use of the HCC-1 molecules to increase engraftment of stem cells in the course of the stem cell transplantation  
15 performed in stem cell transplantation related diseases.